

Amendments to the Specification:

Please replace the paragraph beginning on page 4, lines 17- 30 with the following amended paragraph:

The present invention concerns a real time multi-task operating process in which is defined a set of ~~parameterisable~~ fixed adjustable duration observation windows, characterised by the fact that it includes:

- an allocation stage of a maximum execution duration for each task in each window during which a scheduler guarantees a minimum execution time for lower priority tasks;
- A calculation stage for time spent by each task during each observation window;
- A sanction stage during which the tasks which exceed their quota in a given observation window are sanctioned and can only resume the central unit resource during the following observation window.

Please replace the paragraph beginning on page 7, lines 21- 31 through page 8, lines 1-9 with the following amended paragraph:

In the invention process a set of observation windows is defined, of a fixed adjustable duration ~~and parameterisable~~. In each window a maximum execution duration (a quota) is allocated to each task. During a given window, the task that exceeds their quota are sanctioned and can only resume the central unit resource during the following window. Also so as not to fall into the problem of measuring the previous technique such as previously described and to guarantee a reliable control of the distribution of the central unit resource, a precise calculation of the time spent in each task is made. In the invention process it is no longer the clock pulses, as described previously, which are counted according to the task in the process of execution. Instead, it is the dates for the beginning and end of their activation. To date these events, the

value supplied by the global software counter is used, which is refined by adding to it the time spent since the last clock pulse (residue) read at one stroke in the material counter.

Please replace the paragraph beginning on page 9, lines 22-28 with the following amended paragraph:

A surveillance module 32 enables (arrow 33) ~~a surveillance parameterisation~~ an adjustable surveillance and sends (arrow 34) information on the status of tasks. It also enables (arrow 35):

- dating of events,
- control of use of central resource unit.
- A sanction.

Please replace the paragraph beginning on page 11, lines 24- 31 through page 12, lines 1-8 with the following amended paragraph:

We shall now describe the UNIX 12 standard interface. To control the parameters of the invention's scheduler 18 and to supervise the activities in a UNIX-type operating system, the pilot code or "drivers" is accessible by the user through a special file. The invention scheduler is a pilot that offers a user interface in the form of generic services applied on the special file and described in the POSIX 1003.1 standard. A specific implementation corresponds to a generic service specific to the pilot. Opening and closing file operations (with control of access rights), reading the overshoot history and finally the control/~~parameterisation~~ adjustable operation of the invention scheduler are all separate. The rerouting procedures are internal pilot services not directly accessible from the programme user.